



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0274; Product Identifier 2017-NM-128-AD; Amendment 39-19325; AD 2018-14-05]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-100-1A10 airplanes. This AD was prompted by reports of fire incidents of the auxiliary power unit (APU) inlet, which caused tail cone damage after an initial failed APU start followed by two or more in-flight APU start attempts. This AD requires modification of the APU electronic control unit (ECU) wiring harness. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact

Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0274.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0274; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-100-1A10

airplanes. The NPRM published in the Federal Register on April 13, 2018 (83 FR 16013). The NPRM was prompted by reports of fire incidents of the APU inlet, which caused tail cone damage after an initial failed APU start followed by two or more in-flight APU start attempts. The NPRM proposed to require modification of the APU ECU wiring harness.

We are issuing this AD to address failure of the APU inlet, which could result in a fire during flight.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2017-26, dated July 31, 2017, (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model BD-100-1A10 airplanes. The MCAI states:

APU inlet fire incidents causing tail cone damage have been reported after an initial failed APU start followed by two or more in-flight APU start attempts. Bombardier Inc. (BA) has determined that the in-flight negative pressure differential at the APU inlet allows flash fires of residual fuel in the APU combustor to exit through the APU inlet.

As an interim mitigating action, BA has revised the affected aeroplane Aircraft Flight Manual (AFM) procedure for in-flight APU start to limit the number of APU start attempts.

To further address the safety concerns associated with in-flight APU inlet fire, BA is introducing a modification to the APU Electronic Control Unit (ECU) wiring harness that will prevent a second attempt to start the APU following a failed start in flight. This [Canadian] AD is issued to mandate compliance with BA Service Bulletin (SB) 100-49-04 or SB 350-49-001, as applicable, on affected aeroplanes.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0274.

Comments

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Bombardier has issued Service Bulletin 100-49-04, dated March 29, 2017; and Service Bulletin 350-49-001, dated March 29, 2017. This service information describes a modification of the APU ECU harness. These documents are distinct since they apply to different airplane models in different configurations. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 198 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification	3 work-hours X \$85 per hour = \$255	\$120	\$375	\$74,250

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-14-05 Bombardier, Inc.: Amendment 39-19325; Docket No. FAA-2018-0274;
Product Identifier 2017-NM-128-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF
PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-100-1A10 airplanes, certificated in any category, serial numbers (S/Ns) 20003 through 20500 inclusive and 20501 through 20696 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 49, Airborne auxiliary power.

(e) Reason

This AD was prompted by reports of fire incidents of the auxiliary power unit (APU) inlet, which caused tail cone damage after an initial failed APU start followed by two or more in-flight APU start attempts. We are issuing this AD to prevent failure of the APU inlet, which could result in a fire during flight.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modification

Within 30 months after the effective date of this AD: Modify the APU electronic control unit (ECU) wiring harness, in accordance with the Accomplishment Instructions

of Bombardier Service Bulletin 100-49-04, dated March 29, 2017 (for S/N 20003 through 20500 inclusive); or Bombardier Service Bulletin 350-49-001, dated March 29, 2017 (for S/N 20501 through 20696 inclusive).

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2017-26, dated July 31, 2017, for related information. This

MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0274.

(2) For more information about this AD, contact Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, New York ACO Branch, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 100-49-04, dated March 29, 2017.

(ii) Bombardier Service Bulletin 350-49-001, dated March 29, 2017.

(3) For Bombardier, Inc. service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on June 26, 2018.

Jeffrey E. Duven,
Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-14500 Filed: 7/6/2018 8:45 am; Publication Date: 7/9/2018]